Summer Math Packet – Incoming Fifth Grader

1. Consider the number 951,076

    (a) Write the number in words.   [1]

    _____

    (b) What digit is in the ten thousands place? _____   [1]

    (c) 951,076 = 950,000 + 70 + _____   [1]

    (d) What number is 10,000 more than this number? _____   [1]

    (e) What number is 100 less than this number? _____   [1]

    (f) Round the number to the nearest hundred thousand. _____   [1]

    (g) Which is smaller, 951,076 or 951,067? _____   [1]

2. (a) Find all the factors of 60.   [2]

    _____

    (b) Which of these factors are prime numbers?   [1]

    _____

3. Find the common factors of 15 and 18.   [2]

    _____

4. Find the positive common multiples of 6 and 9 smaller than the product of 6 and 9. [2]

_____

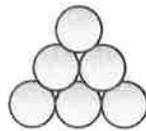5. The figures below form a pattern.

Figure 1   Figure 2   Figure 3   Figure 4   Figure 5

(a) Continue the pattern to draw Figures 4 and 5. [1]

(b) Complete the table by observing the pattern and extending it. [2]

Figure	1	2	3	4	5	6	7
Number of circles	1	3	6				

(c) Describe the pattern in the numbers. How did you find the number of circles for figures 6 and 7 without drawing the figures? [2]

6. Solve using mental math:

   (a) 1,000 – 843 = _____   (b) 458 + 998 = _____   [2]

   (c) 4,539 – 997 = _____   (d) 5,984 – 405 = _____   [2]

   (e) 43 x 99 = _____   (f) 16 x 25 = _____   [2]

7. Find the number represented by n that makes each equation true.

   (a) $n - 35,000 = 42,000$ (b) $863,000 + n = 872,000$ [2]

        $n =$ _____ $n =$ _____

   (c) $n \times 7 = 42,000$ (d) $360,000 \div n = 40,000$ [2]

        $n =$ _____ $n =$ _____

   (e) $64 \times 2 = n \times 4$ (f) $56 - 8 \times 5 + 4 = n$ [2]

        $n =$ _____ $n =$ _____

   (g) $72 \div (4 + 8) = n \div 12$ (h) $n = 200 - 100 \div 10 \times (4 + 6)$ [2]

        $n =$ _____ $n =$ _____

8. Jonas has $100. He wants to buy a game that costs $69.20, a book that   [2]
   costs $19.95. Does he have enough money to also buy a watch that costs
   $22.80? Use estimation.

9. Estimate the answer, and then multiply. [4]

   (a) 4,926 x 6

       Estimate: _____

       Answer: _____

   (b) 8,058 x 4

       Estimate: _____

       Answer: _____

10. Estimate the answer, and then divide. Give your answer as quotient and [4]
    remainder, if there is a remainder.

   (a) 3,120 ÷ 8

       Estimate: _____

       Answer: _____

   (b) 2,080 ÷ 6

       Estimate: _____

       Answer: _____

11. Estimate the answer, and then multiply. [4]

   (a) 386 x 54

       Estimate: _____

       Answer: _____

   (b) 2,409 x 79

       Estimate: _____

       Answer: _____

12. During the last half of a year, Mr. Wilson's salary was $1,985 each month. [2] He saved $4,025 during that time and spent the rest. How much did he spend?

13. A bottle contains blue beads and red beads. The number of red beads is 4 [2] times the number of blue beads. If there are 3,568 red beads, how many more red beads than blue beads are there?

14. Some string 2,305 in. long was cut into two unequal pieces. One piece [2] was 55 inches longer than the other. What is the length of the shorter piece in inches?

15. Write >, <, or = in each ⃝

    (a) $\dfrac{2}{3}$ ⃝ $\dfrac{6}{15}$ (b) 1 ⃝ $\dfrac{2}{7} + \dfrac{3}{7} + \dfrac{2}{7}$ [2]

    (c) $\dfrac{11}{12}$ ⃝ $\dfrac{9}{10}$ (d) $2 - \dfrac{2}{5}$ ⃝ $\dfrac{18}{5}$ [2]

16. Express each of the following as a mixed number.

    (a) $\dfrac{17}{4}$ (b) $3 - \dfrac{11}{7}$ [2]

17. Express each of the following as an improper fraction.

    (a) $4\dfrac{3}{5}$ (b) $2\dfrac{2}{3} + 1$ [2]

18. Give each answer as a mixed number or a fraction in simplest form.

    (a) $\dfrac{3}{8} + \dfrac{2}{8} =$ (b) $\dfrac{5}{6} + \dfrac{5}{6} =$ [2]

    (c) $\dfrac{7}{8} - \dfrac{3}{8} =$ (b) $1\dfrac{3}{5} + 4\dfrac{4}{5} =$ [2]

    (e) $5\dfrac{1}{4} - 2\dfrac{3}{4} =$ (f) $\dfrac{3}{4} + \dfrac{5}{8} =$ [2]

    (g) $\dfrac{5}{12} - \dfrac{1}{3} =$ (h) $3\dfrac{1}{2} + 2\dfrac{5}{6} =$ [2]

    (i) $6 \div 8 =$ (j) $33 \div 6 =$ [2]

    (k) $\dfrac{1}{2} \times 8 =$ (l) $\dfrac{1}{4} \times 6 =$ [2]

    (m) $\dfrac{2}{3} \times 18 =$ (n) $5 \times \dfrac{3}{8} =$ [2]

19. Tom read $\frac{1}{5}$ of a book on Monday and $\frac{2}{5}$ of it on Tuesday. What fraction [2] of the book does he have left to read?

20. In a group of 30 children, 12 are boys. Express the number of girls as a [2] fraction of the children in the group.

21. $\frac{2}{5}$ of the children in a club are girls. 24 of them are boys. How many more [2] boys than girls are there?

22. Mary had some cookies. She gave $\frac{2}{9}$ of them to Matthew and ate $\frac{1}{3}$ of them. She had 8 cookies left. How many did she have at first?   [2]

23. Find the missing numbers.

(a) 3 L 50 ml = _____ ml   (b) 40 ft = _____ yd _____ ft   [2]

(c) 40 ft = _____ ft _____ in.   (d) 50 h = _____ days _____h   [2]

(e) $1\frac{3}{4}$ ft = _____ in.   (f) $1\frac{2}{3}$ h = _____ min   [2]

(g) 3 km 300 m x 5 = _____ km _____ m   [2]

(h) 6 h 40 min ÷ 5 = _____ h _____ min   [2]

24. What fraction of 1 day is 4 hours?   [1]

25. Express 16 in. as a fraction of 3 ft in simplest form. [2]

26. Ms. Grover bought 5 lb 4 oz of beans. She put them into 3 bags. What was the weight of beans in each bag? Give your answer in pounds and ounces. [2]

27. Janice works 7 h and 30 minutes every day for 5 days. She was paid $12 an hour. How much money did she earn? [2]